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ESSENTIALS OF BIRTH SPACING AND FAMILY PLANNING: A RESEARCH ANALYSIS CONDUCTED IN SUBURBAN REGIONS OF HYDERABAD, INDIA

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ABSTRACT

The Objective of this study is to ascertain the knowledge, attitude and viewpoint regarding birth spacing among sexually active married female subjects located in suburban regions of Hyderabad, India. As stated by the WHO, Birth spacing refers to the time from one child birth to the next pregnancy, which must be at least 24 months. We found 41.6% of women in our study had a space of greater than 24 months between successive pregnancies. Background education of a women and proper knowledge of contraception can play a major role in achieving birth spacing and family planning.

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INTRODUCTION

Birth spacing refers to the time from one child birth to the next pregnancy recommended by World Health Organization (WHO) waiting at least two years between each pregnancy to reduce the child and infant mortality and also maternal health. It can also be referred as pregnancy spacing or inter pregnancy interval ^[1].

World Health Organization (WHO) recommends a spacing of atleast 2-3 years between two consecutive births to reduce the risk of infant, child mortality, maternal morbidity ^[2]. Recent studies supported by the United States Agency for International Development (USAID) and World Health Organization (WHO) have recommended that birth spacing is a significant health improving and life saving measure for both mother and child ^[3].

Both short and long term pregnancy intervals have been associated with increased rates of adverse outcomes including fetal death, preterm delivery, low birth weight, small gestation age, stillbirth, malnourished, effect maternal morbidity and mortality, nutritional loss, anaemia, pregnancy induced high blood pressure and associated complications like pre eclampsia, obstructed and prolonged labor and maternal death ^[4].

Importance of birth spacing, healthy timing and spacing of pregnancy is an intervention to help women and families delay or space their pregnancies, to achieve the healthiest outcomes for women and newborns ^[5]. The March of Dimes recommends a minimum of 18 months before becoming pregnant again following an uncomplicated vaginal delivery of a full term infant⁶, while the WHO recommends 24 months ^[5, 6].

There is a significant health risk associated both with pregnancies placed closely together and those placed far apart, but the majority of health risks are associated with births that occur too close together ^[5, 7].

Optimal spacing between successive births or pregnancies has health advantages for both mother and child. Either short (<18 months) or long (>59 months) birth intervals can increase the risk of adverse perinatal and maternal outcomes ^[8].

A shorter interval may be appropriate if the pregnancy ended in abortion or miscarriage, typically 6 months. If the mother has had a prior C-section, it is advisable to wait before giving birth again due to the risk of uterine rupture in the mother during child birth, with recommendations of a minimum inter delivery interval ranging from a year to three years. Pregnancy intervals longer than 5 years are associated with an increased risk of pre-eclampsia ^[5, 9].

Babies born either a short or long birth intervals are likely to be preterm, small for gestational age, and have low birth weight, while their mothers may suffer maternal anaemia, fetal loss, premature rupture of membranes and eclampsia. Therefore, effective birth spacing is important not only for population control but also for improving maternal and child health ^[5].

Birth spacing can be attained by following proper contraceptive measures. Contraception is defined as the intentional prevention of conception through the use of various devices, sexual practices, chemicals, drugs or surgical procedures. Contraceptive use has a lot of benefits for unwanted pregnancies, ensuring birth spacing, reducing child and maternal mortality and morbidity, improving the reproductive health outcome¹⁰. Various methods of contraception include Intra Uterine Devices (IUD) such as Copper – T, Oral Contraceptive Pills (OCPs), Condoms, and permanent methods such as Vasectomy and Tubectomy. Further, there are traditional methods such as Withdrawal method and Calendar based methods ^[11, 12].

Our study majorly focuses on assessment of understanding regarding birth spacing in women living in suburban regions and to impart knowledge regarding family planning.

MATERIALS AND METHODS

The Aim and Objective of this study is to ascertain the knowledge, attitude and viewpoint regarding birth spacing and family planning among sexually active married female subjects. The study also aims to impart knowledge on the importance of birth spacing to the subjects.

This study was approved by the institutional ethics committee and has been conducted at the department of Obstetrics and Gynaecology, Shadan Tertiary Care and Teaching Hospital, Hyderabad. The study was conducted in 100 in-patient and out-patient subjects for a period of six months (July, 2018 to January, 2019).

RESULTS

Table 1: Study group characteristics (FEMALE AGE AT MARRIAGE).

Female age at marriage	Percentage
≤ 18 years	52
between 19-25	41
More than 25	7

Table 1 show that more than 50% women in our study were married before attaining the age of 18 years.

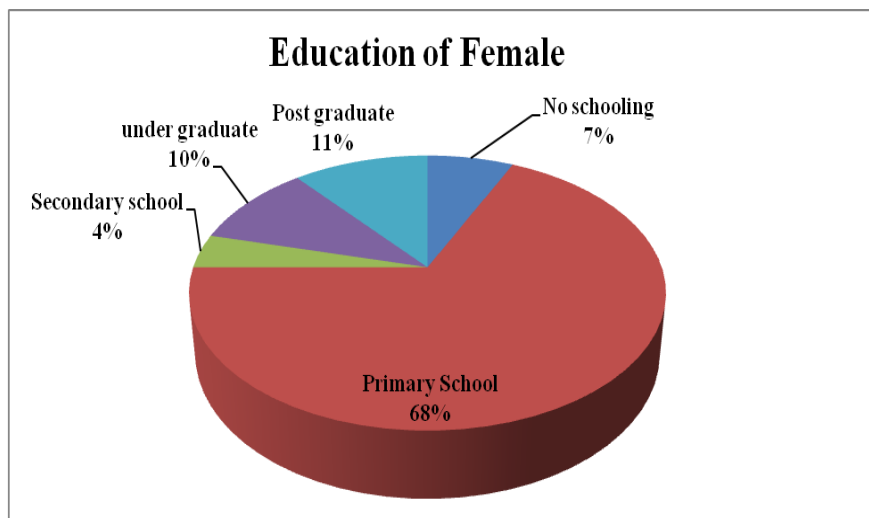


Figure 1: Study group characteristics (Education of female).

Figure 1 show that 68% women in our study attained primary school, while 11% reached up to post graduation.

Table 2: Distribution of Sample Variables Based on Mothers Age during first birth.

Age (Years)	Percentage
15-20	10.4
21-25	48.9
26-30	40.6

Table 2 shows that majority of women in our study were in the age group of 21-25 years during birth of their first child.

Table 3: Study group characteristics (GRAVIDA).

Gravida	Percentage
No Children	4
One Child	22
More than One Child	74

Table 3 show 74% women in our study had more than one child.

Table 4: Study Group Characteristic (Space between Pregnancies).

Space between Pregnancies	Percentage
Less than 24 months	58.4
Greater than 24 months	41.6

Table 4 show 58.4% women in our study had a less than 24months birth spacing between successive child births.

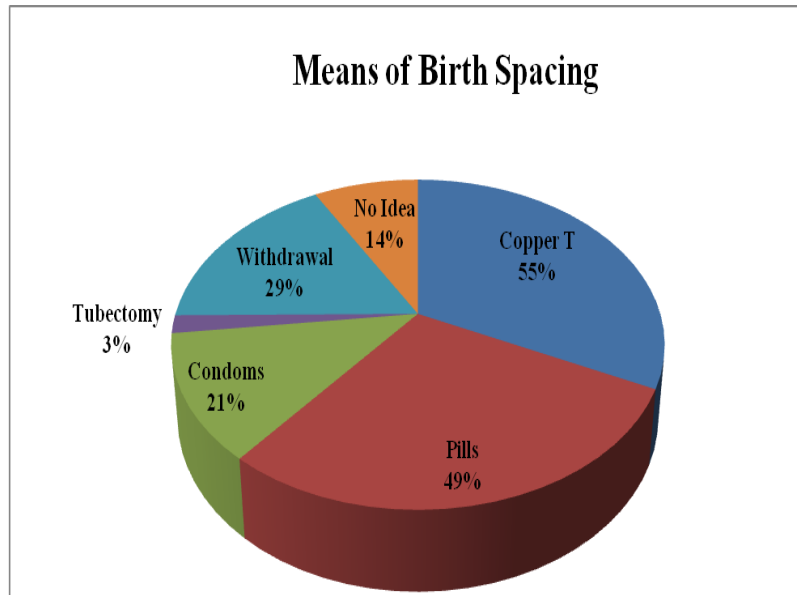


Figure 2: Study Group Characteristics (Means of Birth Spacing).

Figure 2 show 55% and 49% women in our study followed Copper T and Pills method respectively for practicing birth spacing.

DISCUSSION

Our study found that 52% of women were below the age of 18 years during marriage and 41% were in the age group of 19-25 years. A study conducted by M. Aleni *et al* reported 52.7% women in the age group of 25-34 years.

In our study 7% women did not attend school, 68% attended primary school, and 4% attended secondary school, 10% attended under graduate and 11% attained post graduate education. A study conducted by M. Aleni *et al* reported 19.3% did not attend school, while 62.8% and 17.9% attended primary education and secondary education respectively.

As per our study, 48.9% women were in the age group of 21-25 years and 40.6% women were in the age group of 26-30 years, while 10.4% women were aged below 20 years during first pregnancy.

Our study reports 4% of women have no children, 22% had one child and 74% have more than one child. We found that 41.6% women had a space of greater than 24 months between pregnancies, while 58.4% had less than 24 months of space between successive pregnancies. A study by M. Aleni *et al* reported 52.4% had a birth spacing less than 24 months.

55% used Copper T as a means of birth spacing, 49% used pills and 21% used condoms, 3% used Tubectomy, 29% used withdrawal method and 14% had no idea regarding the birth spacing methods. M. Aleni *et al* reported that only 17.2% of the women used contraceptives before the next pregnancy. Another study conducted by G. A. Tessema reported that lack of contraceptive use has been documented in literature as one of the strongest predictors of short birth intervals.

CONCLUSION

As defined by the WHO, Birth spacing refers to the time from one child birth to the next pregnancy, the optimal space is recommended to be a minimum of 24 months between successive births for a better maternal and child health. A slightly more than half of our study population had a less than 24 months birth space between successive child. Background education of women is of a great importance in understanding what's good and what's not, when birth spacing and family planning are concerned. An understanding of contraception and a proper utilization of contraceptives play a major role in not only achieving birth spacing or family planning but also in the prevention of Sexually Transmitted Diseases (in case of condoms). A lack of awareness and neglecting behavior could lead to many untoward happenings to both the mother and child. Hence, doctors and other health care providers must step up and feel it as their responsibility to impart this knowledge to the public. There is a need to take up future research in this area.

ABBREVIATIONS

WHO - World Health Organization
 USAID - United States Agency for International Development
 IUD - Intra Uterine Devices
 OCPs - Oral Contraceptive Pills

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CONFLICTS OF INTEREST

None declared

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